

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007225**Date Inspected:** 01-May-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei / Sun Bo**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** TOWER**Summary of Items Observed:**

The Caltrans (CT) Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

**Heavy Equipment Shop Bay 11:**

The QA Inspector randomly observed ZPMC personnel removing all track used to deliver the diagonal corner stiffeners to the interior of Lift 2 East Tower Shaft. The QA Inspector also randomly observed ZPMC welding personnel installing and turning on Heating Panels in preparation for welding the diagonal corner stiffeners to the interior of Lift 2 East Tower Shaft.

The QA Inspector randomly observed ZPMC welder Zhang Quan Xing ID 070397, utilizing the Flux Cored Arc Welding (FCAW) Process with ZPMC (WPS) WPS-B-T-2133 in the 3F (Vertical Fillet) Position to weld fit lugs to Lift 2 West 77M Lower Diaphragm at Skin B. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. The QA Inspector randomly observed that the welder appears to be having some difficulty manipulating the FCAW nozzle on one side of the fit lugs where the space is fairly narrow. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welders Han Kun ID 066751 and Ni Hai Bing ID 068923, utilizing the FCAW Process with ZPMC (WPS) WPS-B-T-2133 in the 3F (Vertical Fillet) Position to weld fit lugs to Lift 2 West 43M Diaphragm at Skin B. The QA Inspector randomly observed ZPMC QC monitoring weld parameters.

# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Zhang Quan Xing ID 070397, utilizing the Flux Cored Arc Welding (FCAW) Process with ZPMC (WPS) WPS-B-T-2133 in the 3F (Vertical Fillet) Position to weld fit lugs to Lift 2 West 38M Upper Diaphragm at Skin B. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welders removing heating panels and setting up to weld fit lugs to Lift 2 West at 28M Upper/ Lower Diaphragms and 23M Lower Diaphragm at Skin B.

The QA Inspector randomly observed ZPMC welder Zhao Gui Ting ID 040723, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2132-TC-P4-F in the 2G/2F (Horizontal Groove/Horizontal Fillet) Positions to weld the diagonal corner stiffeners between 77M Lower and 74M Upper Diaphragms of Lift 2 East Tower Shaft over the weld seam between Skin Plates B and C. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Ma Shu Sheng ID 040759, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2131-TC-P4-F in the 1G/1F (Flat Groove/Flat Fillet) Positions to weld the diagonal corner stiffeners between 77M Lower and 74M Upper Diaphragms of Lift 2 East Tower Shaft over the weld seam between Skin Plates C and D. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



## Summary of Conversations:

No relevant conversations.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

---

<b>Inspected By:</b>	Franco,Charlie	Quality Assurance Inspector
----------------------	----------------	-----------------------------

---

<b>Reviewed By:</b>	Clifford,William	QA Reviewer
---------------------	------------------	-------------